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Brief Description Drw.

includes the steps of detecting a static acceleration acting on the objective lens in response to a change in the posture of the optical disk device, and driving the slider so that the objective lens is aligned with the center of an optical field of view of the head, based on the detected signal and a low-frequency component of a tracking servo signal for causing the objective lens to track.

The level of the static acceleration (gravity) acting on the objective lens varying in the tracking direction in response to a change in the posture of the optical disk device is detected.

If the slider is driven to position the objective lens to the center of the optical field of view based on the signal detected as the acceleration of gravity and the low-frequency component of the tracking servo signal, slider control is performed with reference to the tracking servo signal corrected to the level of gravity acting on the objective lens.

Even when the objective lens is displaced by its own weight, the optical disk device is free from the problem that the objective lens is displaced from the center of the optical field of view in the slider control.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a block diagram of a major portion of the

internal structure of an optical disk device in accordance with one preferred embodiment of the present invention;

Figs. 2A and 2B illustrate slider control performed by the optical disk device;

Figs. 3A and 3B illustrate slider control performed by the optical disk device; and

Figs. 4A and 4B illustrate the operation of the optical disk device in accordance with one preferred embodiment of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Fig. 1 is a block diagram illustrating the internal structure of an optical disk device 1 in accordance with one preferred embodiment of the present invention.

Fig. 1 illustrates a major portion of the optical disk device 1, namely, only blocks related to a tracking servo system and a slider control system, and does not illustrate other circuit arrangements.

The optical disk device 1, implemented as a video camera, records, on an optical disk 50, video data captured by a camera block (not shown). The optical disk device 1 also replays the video data recorded on the optical disk 50.

Such a video camera is portable rather than being fixed, and may take any position depending on the operational conditions desired by a user.